

The requirement for the oath/declaration is not understood. This is a divisional application. Its parent, in turn, is a divisional application. The declaration in such a case must be a copy of that filed in the grandparent application.

The specification has been amended to refer to all applications from which priority is claimed.

The examiner has rejected claims 5 and 16-19 under 35 USC §101 and §112, first paragraph. These rejections are linked. According to the examiner:

"The specifications have not shown that upon removing the FAP α catalytic domain from the full length FAP α protein, the FAP α catalytic domain is functional or has activity as an independent entity separate from the full length protein."

In response, applicants point out, first of all, that the examiner has employed an improper standard. An applicant's application and claims are presumed to be sufficient. In order to sustain a rejection under either 35 USC §101 or 35 USC §112, first paragraph, the burden of persuasion lies with the examiner, who must set forth a prima facie case. Objective scientific evidence, and/or a logical, persuasive scientific argument must be presented in order for this requirement to be satisfied. The examiner has not done so.

Further, the examiner's statement that "there is no asserted utility other than for further research" both ignores the specification, and misstates the operative law. The examiner appears to be stating that, because research is necessary to prove applicants' assertions, the assertions do not satisfy the utility requirement. That is not the standard by which the utility and enablement requirements are judged. As noted, supra, unless the examiner has scientific evidence to rebut the assertions made in the application, they must be deemed sufficient.

Further, the law is quite clear that standard, inherent utilities can be inputted to a claimed invention. The claimed invention involves proteins, which are of sufficient size that they clearly can function as immunogens. The antibodies resulting from use of such proteins have a clear utility, as in, e.g. determining if a cell is expressing FAP α , or if FAP α is present in a sample.

Finally, applicants have discussed the relationship of FAP α to "DPPIV" in the application, at, e.g., pages 12-13 of the application. Attached hereto is a paper by Ogata, et al, Biochem 31:2582-2587 (1992). Note that the paper shows that the DPPIV catalytic domain is active when it stands

apart from the entire DPPIV molecule. As noted in the specification, DPPIV is the molecule found to be most homologous to FAP α . One of ordinary skill in the art would, in the absence of contrary evidence, conclude that the catalytic domain of FAP α would also have activity, in view of the teachings relating to DPPIV.

For all of the foregoing reasons, the rejections under 35 USC §101 and 35 USC §112 should be withdrawn.

With respect to the rejection under 35 USC §101 and 35 USC §112, second paragraph, the examiner argues that "FAP α catalytic domain" is vague and indefinite. This is traversed.

The examiner points to the table at page 13, and states that "it is not clear what the amino acid sequence limitation is for the human FAP α catalytic domain (i.e. is the catalytic domain limited to the sequences listed in SEQ ID NOS: 4, 6 and 7 where the sequences are simply concatenated as listed in Table 2 with no other amino acids inserted?)"

Table 2 does not simply concatenate amino acids. Ellipses are provided in between the amino acids provided, to indicate amino acids therebetween. The amino acids expressly set out were presented solely for comparison to other known molecules.

Further, as page 12 sets forth, there are "highly conceived catalytic domains" and FAP α "exhibits structural features typical of type II integral membrane proteins." To one of ordinary skill in the art, this is a more than adequate description of what is meant, as the artisan of ordinary skill would clearly be expected to be familiar with this body of literature. Amino acids 621-737 are required, to constitute a catalytic domain. The specification is clear on this point.

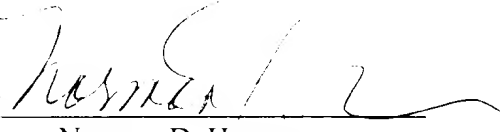
Turning to the rejection of claims 5 and 17, the examiner alleges that "portion" is indefinite. With respect to this rejection, as applied to claim 17, since the portion is defined as an extracellular domain of a CD8 molecule, it is not seen how this can be deemed vague, and indefinite. While applicants do not agree with the examiner's position on claim 5, it has been amended to expedite prosecution.

Claims 16, 17 and 19 have been amended to address the rejection at page 5 of the office action.

It is believed that this application is now in condition for allowance, and a holding to this end is urged.

Respectfully submitted,

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